## (19) World Intellectual Property Organization International Bureau





(43) International Publication Date 6 January 2005 (06.01.2005)

PCT

# (10) International Publication Number WO 2005/000740 A3

(51) International Patent Classification7:

C01B 37/02

(21) International Application Number:

PCT/BE2004/000094

(22) International Filing Date: 28 June 2004 (28.06.2004)

(25) Filing Language:

English

(26) Publication Language:

English

(30) Priority Data: 0315012.5

27 June 2003 (27.06.2003)

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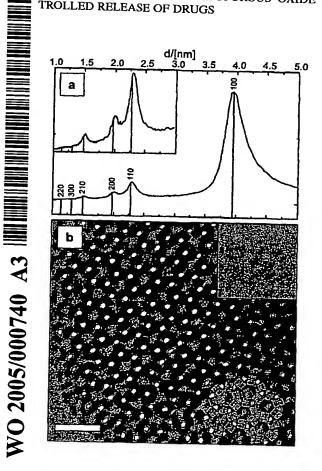
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(81) Designated States (unless otherwise indicated, for every kind of national protection available): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM,

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(54) Title: CRYSTALLINE MESOPOROUS OXIDE BASED MATERIALS USEFUL FOR THE FIXATION AND CON-



(57) Abstract: The invention describes a new class of crystalline silica material having two levels or porosity and structural order. At the first level, building units are nanoslabs of uniform size having zeolite framework. At the second structural level, nanoslabs are assembled, e.g. linked through their corners, edges or faces following patterns imposed by interaction with cationic surfactant or triblock copolymer molecules. After evacuation of these molecules, microporosity is obtained inside the nanoslabs, and a precise mesoporosity between the nanoslabs depending on the tiling pattern of the zeolite nanoslabs, as evidenced by X-ray diffraction. These materials are useful for the fixation of biologically active species, such as poorly soluble drugs.

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- TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.
- (84) Designated States (unless otherwise indicated, for every kind of regional protection available): ARIPO (BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

### Declaration under Rule 4.17:

of inventorship (Rule 4.17(iv)) for US only

#### Published:

- with international search report
- before the expiration of the time limit for amending the claims and to be republished in the event of receipt of amendments
- (88) Date of publication of the international search report: 17 February 2005

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